

SN:09/559,690

IN THE CLAIMS

1. (Previously amended) Seed of maize inbred line designated PH0R8, representative seed of said line having been deposited under ATCC Accession No. PTA-4344.
2. (Original) A maize plant, or parts thereof, produced by growing the seed of claim 1.
3. (Cancelled) /
4. (Original) A tissue culture of regenerable cells from the plant of claim 2.
5. (Previously Amended) A tissue culture according to claim 4, cells or protoplasts of the tissue culture being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
6. (Previously Amended) A maize plant regenerated from the tissue culture of claim 4, capable of expressing all the morphological and physiological characteristics of inbred line PH0R8, representative seed of which have been deposited under ATCC Accession No. PTA-4344.
7. (Original) A method for producing a first generation (F₁) hybrid maize seed comprising crossing the plant of claim 2 with a different inbred parent maize plant and harvesting the resultant first generation (F₁) hybrid maize seed.
8. (Original) The method of claim 7 wherein the inbred maize plant of claim 2 is the female or male parent.
9. (Original) An F₁ hybrid seed produced by crossing the inbred maize plant according to claim 2 with another, different maize plant, it being provided that said F₁ hybrid seed is not hybrid 30F33.
10. (Original) An F₁ hybrid plant, or parts thereof, grown from the seed of claim 9.
11. (Cancelled) /
12. (Cancelled) /
13. (Cancelled) /
14. (Previously Cancelled)

SN:09/559,690

15. (Original) A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 2 as a source of said breeding material.

16. (Previously Amended) The method of claim 15 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

17. (Cancelled) ✓

18. (Cancelled) ✓

19. (Cancelled) ✓

20. (Cancelled) ✓

21. (Previously Amended) A maize plant, or parts thereof, having all the physiological and morphological characteristics of inbred line PH0R8, representative seed of said line having been deposited under ATCC accession No. PTA-4344.

22. (Cancelled) ✓

23. (Original) A tissue culture of regenerable cells from the plant of claim 21.

24. (Previously Amended) A tissue culture according to claim 23, cells or protoplasts of the tissue culture being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

25. (Previously Amended) A maize plant regenerated from the tissue culture of claim 23, capable of expressing all the morphological and physiological characteristics of inbred line PH0R8, representative seed of which have been deposited under ATCC Accession No. PTA-4344.

26. (Original) A method for producing a first generation (F₁) hybrid maize seed comprising crossing the plant of claim 21 with a different inbred

SN:09/559,690

parent maize plant and harvesting the resultant first generation (F₁) hybrid maize seed.

27. (Original) The method of claim 26 wherein the inbred maize plant of claim 21 is the female or male parent.

28. (Original) An F₁ hybrid seed produced by crossing the inbred maize plant according to claim 21 with another, different maize plant, it being provided that said F₁ hybrid seed is not hybrid 30F33.

29. (Original) An F₁ hybrid plant, or parts thereof, grown from the seed of claim 28.

- 30. (Cancelled) /
- 31. (Cancelled) /
- 32. (Cancelled) /
- 33. (Previously Cancelled)
- 34. (Cancelled) /
- 35. (Cancelled) /
- 36. (Cancelled) /

37. (Currently Amended) A process for producing inbred PH0R8, representative seed of which have been deposited under ATCC Accession No. PTA-4344, comprising:

- C³
- (a) planting a collection of seed comprising seed of a hybrid, one of whose parents is inbred PH0R8 said collection also comprising seed of said inbred;
 - (b) growing plants from said collection of seed;
 - (c) identifying inbred parent plants;
 - (d) selecting said inbred parent plant;
 - (e) ~~controlling pollination through selfing, which preserves the homozygosity of~~ selfing or sibbing said inbred parent plant; and
 - (f) collecting morphological and/or physiological data so that said inbred parent may be identified as inbred PH0R8.

SN:09/559,690

38. (Currently Amended) The process of claim 37 wherein step (c) comprises identifying a plants with decreased vigor.

39. (Currently Amended) The process of claim 37 wherein step (c) comprises identifying ~~seeds or plants~~ a plant or a seed with a homozygous genotype.

40. (Currently Amended) A method for producing a first generation PH0R8-derived hybrid maize plant, comprising:

- (a) crossing inbred maize line PH0R8, representative seed of said line having been deposited under ATCC Accession No. PTA-4344, with a second maize plant to yield progeny maize seed;
- (b) growing said progeny maize seed, under plant growth conditions, to yield said first generation PH0R8-derived hybrid maize plant.

41. (Previously Cancelled)

42. (Currently Amended) The method of claim 40, further comprising:

- (c) crossing said first generation PH0R8-derived hybrid maize plant with itself ~~or another maize plant~~ to yield additional PH0R8-derived progeny maize seed;
- (d) growing said progeny maize seed of step (c) under plant growth conditions, to yield additional PH0R8-derived maize plants;
- (e) repeating the crossing and growing steps of (c) and (d) ~~from 0 to 4 times~~ for successive filial generations to generate a further PH0R8-derived maize plants ~~wherein said further PH0R8-derived maize plants express a trait genetically derived from inbred PH0R8.~~

43. (Previously Cancelled)

44. (Cancelled) /

45. (Previously Cancelled)

46. (Previously Cancelled)

47. (Cancelled) /

48. (Cancelled) /

SN:09/559,890

49. (Cancelled)

50. (New) The further PH0R8-derived maize plant of claim 42 wherein said further PH0R8-derived maize plant has at least 50% genetic contribution from inbred maize line PH0R8.

51. (New) A method of developing a backcross conversion PH0R8 maize plant wherein an inbred maize plant PH0R8 is crossed to a second maize plant, wherein a trait is backcrossed into said inbred maize plant PH0R8, and wherein said inbred maize plant PH0R8 is a recurrent parent.

52. (New) The backcross conversion PH0R8 maize plant of claim 51 wherein the trait backcrossed into said inbred maize plant PH0R8 confers a trait from a group consisting of herbicide resistance, insect resistance, disease resistance, male sterility, and waxy starch; and wherein inbred maize plant PH0R8 has been used as a recurrent parent at least two times.

53. (New) A method of developing a first generation hybrid maize plant comprising crossing the backcross conversion PH0R8 maize plant of claim 52 with a second maize plant.

54. (New) The first generation hybrid maize plant developed by the method of claim 53.

55. (New) A method of developing a transgenic PH0R8 maize plant wherein inbred maize plant PH0R8 is transformed with a transgene.

56. (New) The transgenic PH0R8 maize plant of claim 55 wherein said transgene confers a trait from the group consisting of insect resistance, herbicide resistance, disease resistance, and male sterility.

57. (New) A method of developing a first generation hybrid plant comprising crossing the transgenic PH0R8 maize plant of claim 56 to a second maize plant.

58. (New) The first generation hybrid plant produced by the method of claim 57.